Amendments to the Specification

Please replace the paragraph bridging pages 2-3 with the following amended paragraph:

Transformation of cotton: *Agrobacterium*-mediated cotton transformation was first reported a decade ago with hypocotyl and cotyledon as explants (~~**Firoozababy**~~ **Firoozabady** et al., 1987; Umbeck et al., 1987). Several useful genes have been introduced into cotton via *Agrobacterium*-mediated transformation, including insect and herbicide resistance genes (Perlak et al., 1990; Trolinder et al., 1991; Chen et al., 1994). Explants (such as hypocotyl, cotyledon, callus generated from hypocotyl and cotyledon, as well as immature embryos) have been used for *Agrobacterium*-mediated transformation and particle bombardment (de Framond et al., 1983; Finer & McMullen, 1990; Firoozabady et al., 1987; Perlak et al., 1990; Rangan & Rajasekaran, 1996; Rajasekaran et al., 1996; Trolinder et al., 1991; Umbeck et al., 1987, 1989, 1992). In addition, meristematic tissue of excised embryonic axes has also been used for cotton transformation by particle bombardment (Chlan et al., 1995; John, 1996; John & Keller, 1996; McCabe & Martinell, 1993). Zhou et al. (1983) transformed cotton by injecting DNA into the axile placenta one day after self-pollination.

Please replace the paragraph bridging pages 3-4 with the following amended paragraph:

However, the transformation rates were generally low, ranging from 20 to 30% when hypocotyl were used as explant (~~Firoozababy~~ **Firoozabady** et al., 1987; Cousins et al., 1991; Rajasekaran et al., 1996). A significantly higher transformation efficiency, up to 80%, was reported when cotyledon was used as explant and the ocs gene encoding octopine synthetase used as the reporter gene (~~Firoozababy~~ **Firoozabady** et al., 1987). However, the validity of octopine as a marker for transformation is questionable because octopine has been found in several plant species certainly not transformed by infection with *A. tumefaciens* (Wendt-Gallitelli and Dobrigkeit, 1973). A more recent report indicated that the transformation efficiency of cotyledon was about 20 to 30% (Cousins et al., 1991). The transformation efficiency was even lower when particle bombardment method was used (Keller et al., 1997). A difference in the type of explants used for transformation could have a significant effect on the efficiency of transformation and regeneration. It has been reported, for example, that for reducing false positive transformants, cotyledon was a better explant than hypocotyledon (Firoozabady et al., 1987).

Please replace paragraph 1 on page 4 with the following amended paragraph:

Cotton transformation also is highly dependent on genotype (Trolinder, 1985a, 1986; Trolinder & Goodin, 1987, 1988a, 1988b; Trolinder & Chen, 1989). Apart from a few cultivars which are regenerable and transformable, such as *Gossypium hirsutum* cv. Coker 312 and *G. hirsutum* Jin 7, most other important elite commercial cultivars, such as *G. hirsutum* cv. D&P 5415 and *G. hirsutum* cv. Zhongmian 12, are not ~~**regeneratable**~~ **regenerable** and transformable by these methods. The absence of a high-efficiency plant regeneration method has been regarded as a major obstacle to the application of *Agrobacterium*-mediated transformation to cotton (Gawel et al., 1986; Firoozabady et al., 1987).

Please replace paragraph 3 of page 13 with the following amended paragraph:

(7) Young plant growing medium

S&H medium Macro and Micro elements (~~**Strewart**~~ **Stewart** and Hsu, 1977)

Please replace paragraph 7 of page 20 with the following amended paragraph:

~~Firoozababy~~ **Firoozabady** E., DeBoer D.L., Merlo D.J., Halls E.J., Anderson L.N., Raska K.A., Murray E.E. 1987. Transformation of cotton, Gossypium hirsutum L. by Agrobacterium tumefaciens and regeneration of transgenic plants. Plant Molecular Biology 10, 105 1 16.

Please replace paragraphs 7-8 of page 22 with the following amended paragraph:

Schilperoort, R.A., Hoekema, A., Hooykaas, P.J.J. 1990. Process for the incorporation of foreign DNA into the genome of ~~dicotyledmous~~ **dicotyledonous** plants. U.S. Patent No. 4,940,838.

Schilperoort, R.A., Hoekema, A., 1995. Process for the incorporation of foreign DNA into the genome of ~~dicotyledmous~~ **dicotyledonous** plants. U.S. Patent No. 5,464,763.

Please replace paragraph 2 of page 23 with the following amended paragraph:

Stewart, J. M.D. and Hsu, C. L. 1978. Hybridization of ~~deploid~~ **diploid** and tetraploid cottons through in-ovulo embryo culture. J. ~~Heridity~~ **Heredity** 69, 404-8.

Please replace paragraph 3 of page 24 with the following amended paragraph:

Walkerpeach, C.R. and Veltern, J. 1994. *Agrobacterium*-mediated gene transfer to plant cells: cointegrate and binary vector systems. Plant Mol. Biol. ~~Mannuel~~ **Manual** B1, 1-19.